

A3
cont.

wherein the impedance transformer network is joined in parallel with the source,
and comprises a negative resistor in series with an inductor.

10. (Amended) A circuit for input side impedance matching of a power amplifier in an electronic device, comprising:

a source for providing a signal, wherein the signal has a predetermined impedance;

an impedance transformer network to synthesize the predetermined impedance at an

A4

input of the power amplifier, said impedance transformer network being joined in parallel with the source and comprising a negative resistor in series with an inductor;

wherein a value of the negative resistor is selected to synthesize the predetermined impedance at an input of the power amplifier, and wherein the inductor has a reactance equal to a capacitance of the device at a required frequency of operation.

15. (Amended) A method for matching impedance at an input of a power amplifier in an electronic device, comprising the steps of:

providing a signal from a source, wherein the provided signal has a predetermined impedance;

A5

joining an impedance transformer network in parallel with the source to synthesize the predetermined impedance at an input of the power amplifier, wherein the network comprises a negative resistor in series with an inductor; and

selecting a value for the negative resistor so that the predetermined impedance is synthesized at the input of the power amplifier.
